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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,079	11/29/2000	Antti Toskala	297-009974-US(PAR)	9639

7590 05/28/2004
Clarence A. Green
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EXAMINER

PHU, PHUONG M

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 05/28/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,079

Applicant(s)

TOSKALA ET AL.

Examiner

Phuong Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 4/22/04.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the city and either state or foreign country of residence of inventor Mirko Aksentijevic. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Shon (5,796,755), previously-cited.

As per claims 1 and 4, see figures 1, 3 and 5 and col. 1, line 20 to col. 2, line 8 and col. 3, line 20 to col. 4, line 5, Shon discloses a method and a system (figure 5) comprising:

step/means (14) for performing a permutation to a stream of digital data (A, B,..., G), thus producing a permuted stream of digital data (A1,B1,..., G1,A2, B2,...,G2,...,A16,B16,...,G16) ; producing, from the permuted stream of digital data, at least

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two component streams(A1,B1,..., G1) and (A5,B5,..., G5), and reversing the order of information symbols in at least one component stream (A5,B5,..., G5) into (G5,..., B5,A5) (see figure 3); and step/means (18) for mapping each component stream into a "Sync Block" code (e.g., (A1,B1,..., G1) into (SYNC, A1,B1,..., G1) and (G5,..., B5,A5) into (SYNC,G5,..., B5,A5)), (see figure 3, and col. 1, lines 49-51 and col. 3, lines 27-30).

As per claim 2, Shon discloses that step/means (14) reverses the order of information symbols in every second component stream for in each TRACK prior to mapping these component streams (see figure 3).

As per claim 3, Shon discloses that that step (14) writes the information symbols such that the information symbols can be formed as a matrix (A1,...G1;A2,...,G2;....;A16,...,G16) and arranges the information symbols such that the information symbol can be read from the columns of the matrix in a column order which is different than the order of contiguous columns in the matrix; so that step (14) produces at least two component streams and reverses the order of information symbols in at least one component stream for each TRACK (see figure 3).

As per claims 5 and 6, Shon discloses that the system is a station or terminal of a communication system (see figure 5).

Response to Arguments

5. Applicant's arguments filed on 4/22/04 have been fully considered but they are not, in part, persuasive.

Regarding to the objection to the Abstract, the objection is now withdrawn since the Abstract has been amended to overcome the objection.

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Regarding to the rejection, under 35 USC 112, to claims 5 and 6, the rejection is now withdrawn since the Specification has been amended to overcome the objection.

Applicant's argument with respect to the objection to Oath/Declaration is not persuasive. In the Oath/Declaration, the residence and the post office address of each of the inventor must be provided (see MPEP 602.01 and 602.02). Usually, the residence and the post office address of an inventor are provided separately in the Oath/Declaration since the residence address can be different from the post office address. In the case, the residence and the post office address are the same, it must be stated so in the Oath/Declaration. As for the Oath/Declaration of the inventors of the instant application, it appears that, for the inventor Mirko Aksentijevic, only the post office address is given, and the residence information is not given. If the residence and the post office address of the inventor Mirko Aksentijevic are the same, it must be stated so in the Oath/Declaration. Based on this rationale, the objection is still maintained and repeated in this Office Action.

Applicant's argument with respect to the rejection, under 35 USC 102, to claims 1 and 4, is not persuasive. The applicant mainly argues that the "Sync Block" code disclosed by Shon (5,796,755) is not the "spreading" code, as recited in the claimed. The examiner respectfully disagrees. Note that the rejection is based on the limitations given in the claims. In claims 1 and 4, "spreading" in the limitation "a spreading code" is not given any patentable weight over Shon "Sync Block" code because the claims do not have other limitations which describe any physical/mathematical characteristics and/or parameters (e.g., amplitude/frequency, data rate, waveform in time/frequency domains, etc.) of the "spreading code" showing the feature "spreading" in order to make it distinguishable from Shon "Sync Block" code; therefore, the

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“spreading code”, recited in the claims, is considered here merely as a digital code, and therefore, it is considered being disclosed by Shon “Sync Block” code. Based on the above rationale, it is believed that the limitations of claims are still met and therefore, the rejections are still maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Phuong Phu
05/27/04

Phuong Phu
Primary Examiner
Art Unit 2631

PHUONG PHU
PRIMARY EXAMINER